

NVLAP Accreditation and HAVA

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National Voluntary Laboratory Accreditation Program



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NVLAP Workshop of August 2004

NVLAP Workshop for Laboratories Testing to the Voting System Standards (VSS) took place from 9am to 4pm on August 17, 2004 in the Green Auditorium, NIST Campus, Gaithersburg, MD

Webcast Archive Link:

<http://www.eastbaymedia.com/NVLAPworkshop/>

Printed workshop documents are available from
NVLAP

Why Laboratory Accreditation (and Conformity Assessment)?

- So you don't have to worry.
 - Confidence - it has been done right
 - Competence - get the right answer
 - Equivalence - get the same answer
 - Independence - nothing else is going on
 - Appropriateness - fit for purpose

What is NVLAP?

- A third-party, independent process for accreditation of testing and calibration laboratories
- Established in the U.S. Code of Federal Regulations (CFR, Title 15, Part 285) in 1976
- Administered by NIST
- Linked to NIST research units
- Based on international (ISO/IEC) standards
- Available to any qualifying laboratory (public or private)
- Fee supported
- Nationally and internationally recognized
- 800+ labs in the system today
- However, NVLAP is not a product certifier

Accreditation Criteria

- NIST Handbook 150, NVLAP Procedures and General Requirements
- ISO/IEC International Standard 17025, General requirements for the competence of testing and calibration laboratories
- The 2002 Voting System Standards
- Any other criteria deemed necessary by the Election Assistance Commission (EAC)

Where NVLAP Fits in the Testing Picture

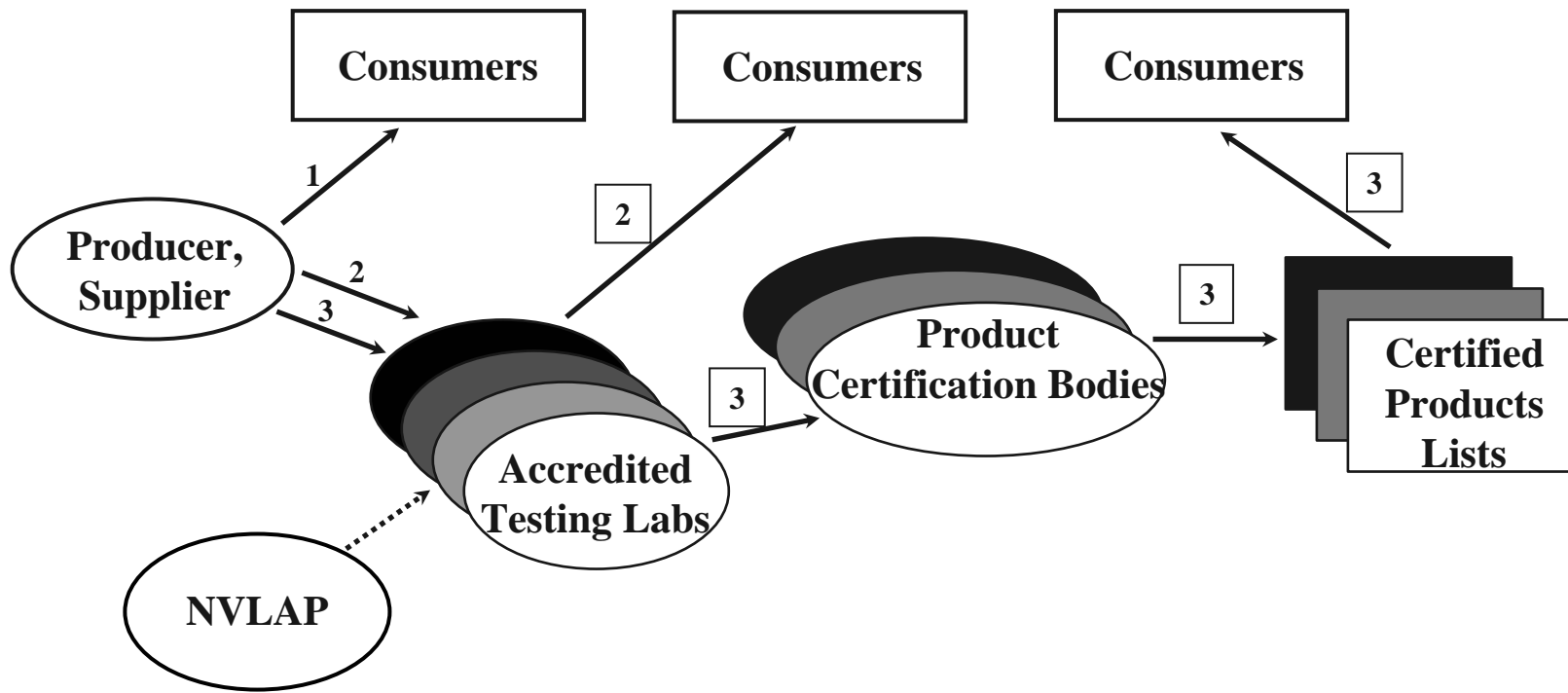
- Testing during design and development (vendor can use any laboratory)
- Qualification Testing (use of NVLAP- accredited, EAC-designated laboratory required)
- Certification Testing (State can use any laboratory)
- Acceptance Testing (purchasing election authority can use any laboratory)

All can benefit from the use of
accredited testing laboratories

Who gets accredited as a VSTL?

- This Laboratory Accreditation Program (LAP) will accredit Voting System Testing Laboratories (VSTL)
- A VSTL is a laboratory that provides testing of systems and components to the portions of the VSS that relate to voting.
- Per HAVA, NIST will recommend NVLAP-accredited VSTLs to the EAC
- NIST may also recommend NVLAP-accredited test laboratories for EMC, environmental, and other non-voting testing in the VSS

Paths to Consumer

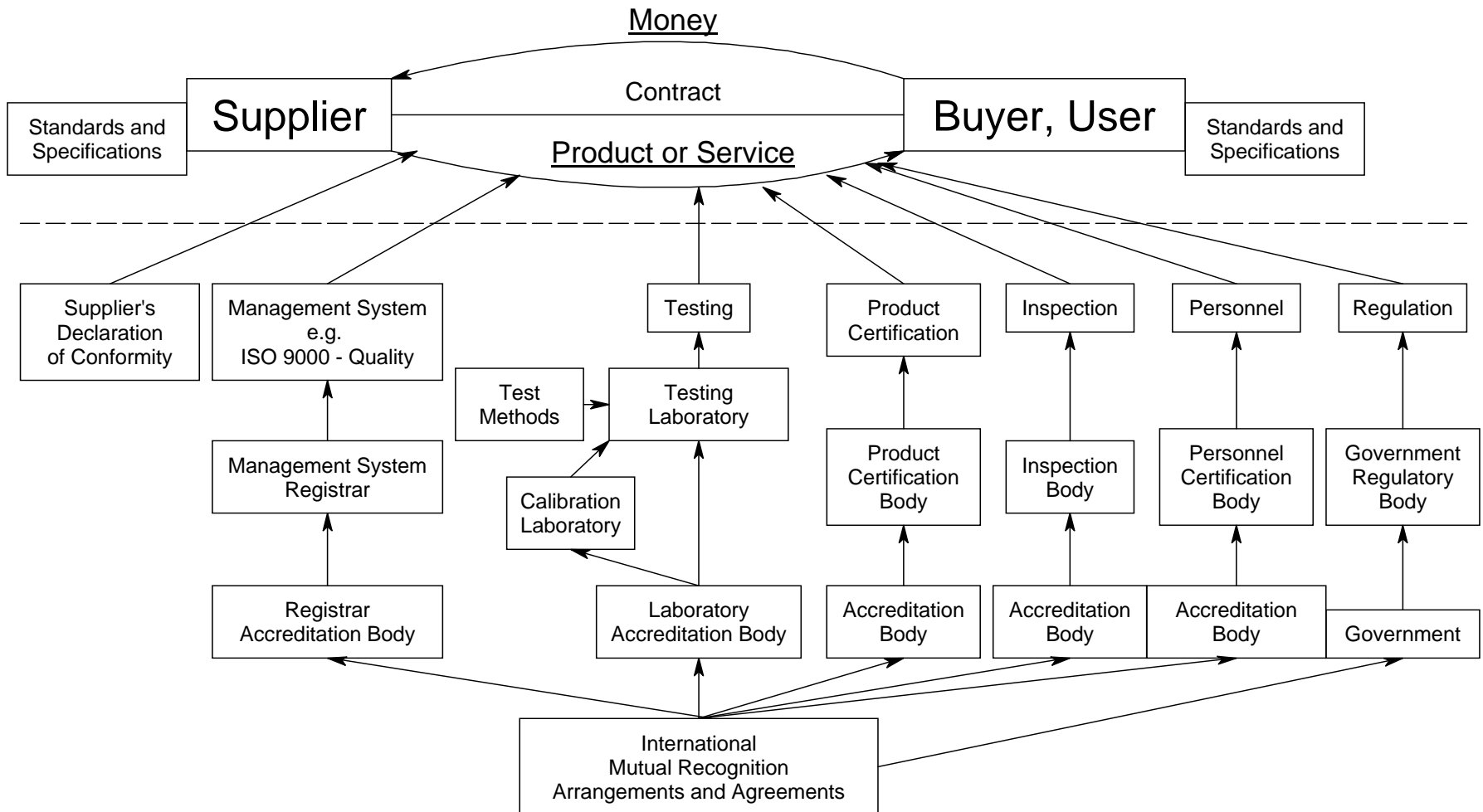


Path 1: Declaration of Conformity

Path 2: Conformance demonstrated by testing in accredited laboratory

Path 3: Conformance demonstrated by testing and product certification

DOMESTIC AND INTERNATIONAL TRADE



CONFORMITY ASSESSMENT

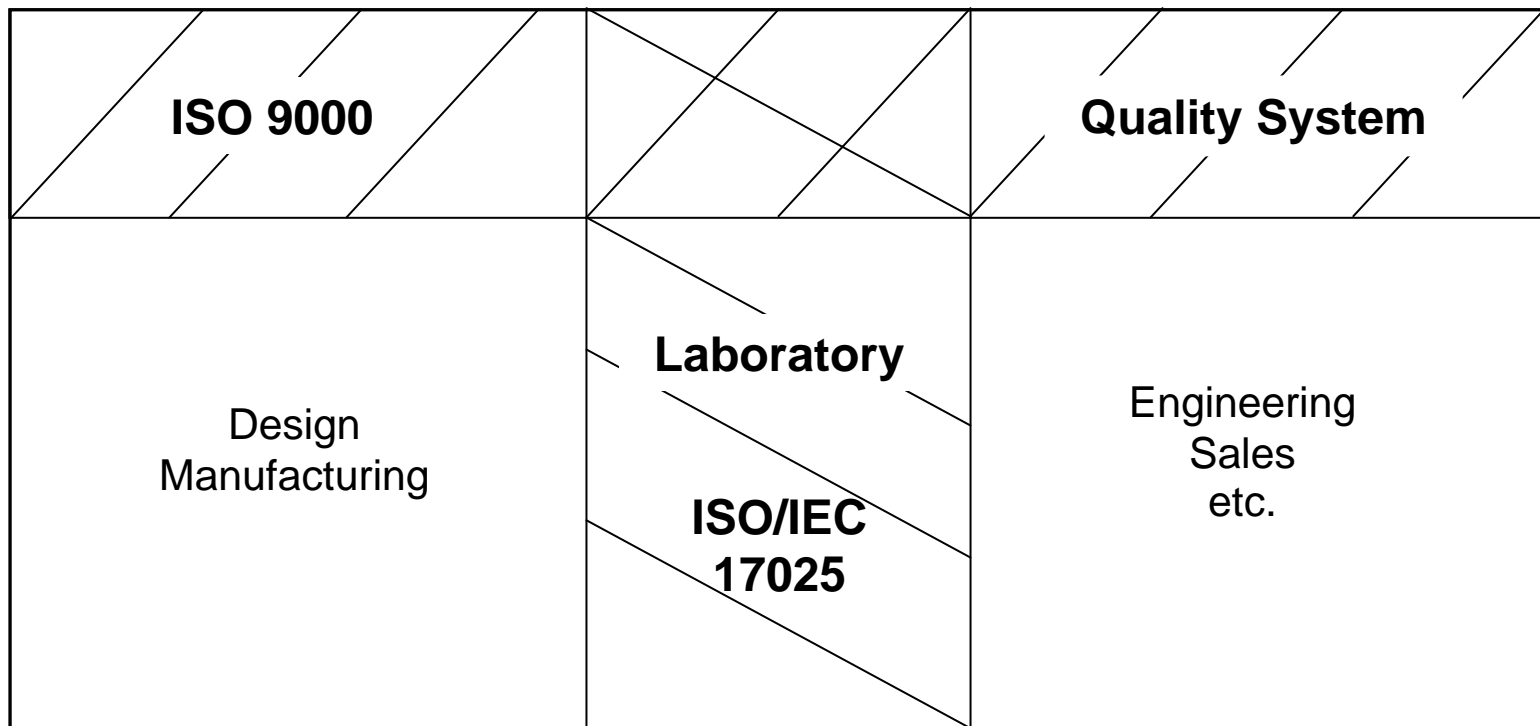
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Laboratory Accreditation to ISO 17025

- Review of documents: Quality Manual, Procedures Manual, Instructions, Records,
- On-site assessment by a team of peer technical experts (who have had ISO 17025 training)
- Participation in proficiency testing
- Evaluation of the above by NVLAP team
- feedback to the laboratory
- corrective action by the laboratory

ISO 9000 and ISO/IEC 17025

ISO 9000 is a stripe across the top of an organization



**ISO/IEC 17025 is stripe from top to bottom
covering the entire laboratory**

Developing a Program

- **start with NIST Handbook 150**
- **NVLAP seeks input from all sectors of the community including laboratories, developers, vendors, standards writers, regulators, customers, certifiers, the public**
- **NVLAP receives request for new program**
- **NVLAP publishes the request for a new program in the Federal Register**
- **expert advice is sought**
- **input is needed both now and later**

Developing a Program - 1/5

- **identify testing laboratory community (how many, will they apply for accreditation)**
- **identify laboratory user community**
- **identify standards development organizations for hardware, software, and systems**
- **identify test methods and standards**
- **Identify who will improve and interpret test methods and standards**
- **identify product certification and validation programs**

Developing a Program - 2/5

- **identify regulatory bodies**
- **identify other stakeholders**
- **identify sources of technical expertise and assistance**
- **Identify sources of training for labs and vendors**
- **identify level of "traffic" - how many labs and how much work is there**
- **select the "units" of the Scope of Accreditation**

Developing a Program - 3/5

- **establish specific technical requirements**
- **establish laboratory staff qualifications and certifications**
- **Set priorities - what is most important**
- **components of a laboratory: equipment, facilities, environment, software,**
- **establish accreditation process sequence**
- **develop the assessment techniques for on-sites, quizzes, demonstrations, etc.**

Developing a Program - 4/5

- **set time needed for on-site assessments**
- **design proficiency testing programs**
- **set criteria, seek, and select peer technical expert assessors**
- **train assessors to use ISO 17025**
- **set on-site team size and "skill set"**
- **create NVLAP program-specific checklist(s)**
- **NVLAP Program Handbook 150-xx for the new program detailing specific technical requirements**

Developing a Program - 5/5

- **establish evaluation criteria for granting of accreditation**
- **hold public workshops**
- **establish fee schedule (estimate \$11k for first year, \$4k for second year)**
- **contents of NVLAP application package**
- **publish Federal Register announcement**
- **time window for accepting initial applications - after that, no restrictions**

ILAC Brochures

<http://www.ilac.org/> see Publications

- Why Use An Accredited Laboratory?
- Why Become An Accredited Laboratory?
- How Does Using an Accredited Laboratory Benefit Government & Regulators?
- The Advantages of Being An Accredited Laboratory

ILAC = International Laboratory Accreditation Cooperation
available in English, Russian, Japanese, Spanish, Chinese